

Installing and Setting Up Natural 5.1.1 under OpenVMS

This document describes the installation of Natural under OpenVMS and the steps you need to take before and after the installation.

- Overview of the Installation Procedure
- PCSI Installation Procedure
- After the Installation Procedure
- Activating the Natural Buffer Pool
- Setting Up the Entire System Server Interface

If you have not yet done so, please see also:

Before You Start Installing Natural 5.1.1 Under OpenVMS | Installing Software AG Products under OpenVMS

Overview of the Installation Procedure

The installation procedure PCSI automatically performs the following steps when used to install Natural:

- Checks which OpenVMS version is running.
- Temporarily sets the privileges (BYPASS, CMKRNL, SYSNAM).
- Checks whether Sagbase is installed.
- Modifies the DBA account if required.
- Checks whether system parameters have correct values, and if they do not, a procedure is generated that assigns the correct values.
- Registers product SAGBASE to PCSI if required.
- Calculates and verifies the disk space needed for installation on both the work-directory device and the installation device.
- Creates Natural directories if necessary.
- Moves all files and images to the appropriate directories.
- Sets protections for files and directories.
- Asks whether you want to copy STARTUP_NAT5.COM into the SAG\$ROOT:[NATURAL] directory or the SYS\$STARTUP directory.

Note: If you want Natural to be loaded and activated automatically at every booting, specify the option that the STARTUP_NAT5.COM shall be moved to SYS\$STARTUP during the PCSI installation. An entry in the system startup database will then automatically be generated. When rebooting, STARTUP_NAT5.COM will then be invoked with the most current Natural version number as parameters P1 and parameter P2 will be set to BP. For more information, see *Changing a Process Environment with STARTUP_NAT5.COM*.

- Asks whether you want to modify the system startup database (only if the directory SYS\$STARTUP was selected to contain STARTUP_NAT5.COM).
- Creates the patch level file in the version subdirectory of Natural directory (in this version, "V511p").

Note: Patch level files are for internal use and should not be modified or deleted. They are used for other installations.

- Inserts the node-specific buffer-pool section into the NATURAL.INI file.
- Asks for the location of the buffer-pool section file.
- Creates the buffer pool start procedure NATBPENV_<nodename>.COM

Note: For more information, see *Activating the Natural Buffer Pool*.

- Executes STARTUP_NAT5.COM for the new Natural version.
- Verifies the installation.

PCSI Installation Procedure

Before you start installing Natural using the PCSI procedure, perform the steps necessary for Installing and Setting up Software AG products for OpenVMS and see the information described in Before You Start Installing Natural 5.1.1 Under OpenVMS.

You have started the installation using the command procedure SETUP.COM located on CD to install Natural in the OpenVMS environment.

SETUP.COM copies the Natural PSC file from the CD to the SAG\$ROOT:[CDINST] directory and starts the Polycenter Software Installation utility (PCSI). During the installation procedure, a number of general information messages are displayed. Read all messages carefully and follow any advice they may provide.

Continue the PCSI installation

The following messages are displayed during the installation process:

```
The following product has been selected:
SAG AXPVMS NAT_vrsp Vv.rs-PLp Layered Product [Installed]
```

```
Do you want to continue? [YES]
```

Answer: yes

The installation procedure checks if the product SAGBASE (GBA) has already been installed and registered with the PCSI utility. If GBA has been installed but not yet registered, you will be asked to do so. Register by following the instructions on the screen.

If the SAGBASE software has not been found on your system the installation aborts.

Modify the PCSI options

```
Do you want the defaults for all options? [YES]
```

Answer "no" to modify the options.

```
Do you want to copy the examples?
```

Answer: yes

```
Print READ_ME_FIRST.TXT (SYS$PRINT)?
```

Answer is optional (yes or no)

```
Move STARTUP_NATv.COM to SYS$STARTUP?
```

Press RETURN to accept the default: the startup file is moved to the SYS\$STARTUP directory and an entry is made in the startup database. Software AG recommends running the STARTUP_NATv.COM procedure during system startup.

If you enter NO, the startup file will be moved to the directory SAG\$ROOT:[NATURAL].

If you used the default value, the following prompt is displayed:

```
Enable STARTUP_NATv.COM using SYSMAN? [YES]:
```

Press RETURN to generate entries in the system startup database in order to execute the procedure automatically during system startup.

An entry of the following form will be generated:

Phase	Mode	File
LPBETA	DIRECT	STARTUP_NATv.COM

Run STARTUP_NAT5.COM after successful installation?

Answer is optional (yes or no).

Are you satisfied with these options ?

Answer is optional (yes or no).

The procedure now installs Natural to the destination directory.

Setup the Natural buffer pool section file

The procedure inserts the node-specific buffer pool section into the NATURAL.INI file.

The information about the global section file for the Natural buffer pool file is displayed. You have the choice to place the section file into the NATETC directory or to another location.

Place global section file into NATETC ?

Answer is optional (yes or no)

If you specified "Run STARTUP_NAT5.COM after successful installation", the procedure continues by executing STARTUP_NATv.COM with parameters P1: <vrsp> and P2:BP to define the logical names required by Natural. The Natural images will not be installed. See the section Changing a Process Environment with STARTUP NAT4.COM below.

After a successful installation, the PCSI utility displays the message:

The following product has been installed:

SAG AXPVMS NAT_vrsp Vv.rs-PLp Layered Product

After the Installation Procedure

- Completing the Installation
- Verifying the Installation
- Changing a Process Environment with STARTUP_NAT5.COM
- Remote Debugger

Completing the Installation

To complete your Natural installation, go to the following directory:

```
$ set def sag$root:[Natural.v511p.install]
```

In this directory, execute the following procedure:

```
$ @SAGINST_NAT.COM
```

The "Installation Procedure" screen appears. It offers two functions:

- 1 - Load Natural modules
- 2 - Check logfile of inpl procedure

To complete the installation, first execute Function 1, then execute Function 2. If you want to use the Natural command processor, execute Functions 3 and 4.

- 3 - Specify Adabas DBID for SYSNCP
- 4 - Create SYSNCP file

Your installation is now complete. To invoke Natural, enter "NAT51".

Verifying the Installation Procedure

To verify the product entry in the PCSI database enter:

```
$ PRODUCT SHOW PRODUCT NAT_<vrsp>
```

Changing a Process Environment with STARTUP_NAT5.COM

During the Natural installation with PCSI as described above, the command procedure STARTUP_NAT5.COM was executed for the environment, if you answered "Run STARTUP_NAT5.COM after successful installation?" with yes. However, if you want to change a user-specific environment, you can use STARTUP_NAT5.COM again, but you specify different parameters. These parameters are:

- P1 - Natural version, for example 5112 (Natural version 5.1.1. does not use a version file anymore)
- P2 - BP or NOBP, that is, whether you want to activate the Natural buffer pool or not.
- P3 - INST or nothing, that is, whether you want to install the Natural Images or not.

Note:

If you wish to install the Natural images, you must have the privileges SETPRV, CMKRNL, SYSNAM or SYSPRV.

Enter the following command to start STARTUP_NAT5.COM:

```
$ @STARTUP_NAT5 P1 P2 P3
```

for example @STARTUP_NAT5 5112 BP INST.

Activating the Natural Buffer Pool

To activate the Natural buffer pool, you execute the command procedure STARTUP_NAT5.COM with parameter P2 = "BP" as in the following example:

```
$ @STARTUP_NAT5.COM <vrsp> BP
```

Remote Debugger

If you want to use the remote debugger, copy sag\$root:[Natural.v511p.dbrmt]nrd_i386.exe to your Windows computer.

Transferring the Remote Debugger

To transfer the Natural Remote Debugger from your OpenVMS environment to a Windows PC, perform the following steps:

1. Open the command prompt on your Windows PC.
2. Run Windows ftp service:

```
ftp <NODE>
```

where <NODE> is the Open VMS machine where your Natural installation is located.

3. After you have logged on successfully, apply the ftp 'binary' command to switch to binary transfer mode.
4. Use the ftp 'SET DEFAULT' command to go to the OpenVMS directory where the Remote Debugger installation is available.

```
set default SAG$ROOT:[NATURAL.V<vrsp>.DBRMT]
```

5. Apply the ftp 'get NRD_I386.EXE' command to have the Remote Debugger installation transferred to your PC. NRD_I386.EXE is a self-extracting ZIP file.
6. In Windows, run NRD_I386.EXE to unzip all files. The files will be put into the I386 directory.
7. Go to directory I386 and install the Remote Debugger by running "setup.exe" from the command prompt of your Windows machine.

Setting Up the Entire System Server Interface

The Entire System Server Interface (ESX) is required if the product Entire System Server (ESY) is to be used. The Entire System Server Interface is part of Natural Version 5.1.1 and no extra installation is needed.

Additionally, Natural Version 5.1.1 provides the libraries SYSNPE and SYSNPR.

SYSNPE is the Entire System Server online tutorial as starting help for Entire System Server users. For more information about Entire System Server, see Entire System Server Overview.

The library SYSNPR contains the utility CHANGEDB which is used to change the database ID of the Entire System Server DDMs.

This section covers the following topics:

- Prerequisites
- Activation

Prerequisites

The Entire System Server Interface provides access to Entire System Server on OS/390, VSE/ESA and BS2000/OSD via Entire Net-Work. For full support of the Entire System Server Interface, WCP 581 or above is required on the mainframe platforms.

Activation

The Entire System Server Interface is not active if you use the standard Natural configuration settings. The value of the Entire System Server Interface database (Natural profile parameter ESXDB) is set to 0 by default. To use the Entire System Server Interface, you need to run the Natural Configuration Utility and must set the value of the parameter ESXDB to 148. The parameter can be found in the Natural Configuration Utility > Natural Parameter Files > Product Configuration > Entire System Server.

ESXDB specifies the database ID used for the DDMs of Entire System Server. This DBID does not specify the target DBID of Entire System Server requests but tells Natural which DBID is used for the catalogued Entire System Server DDMs. The effective Entire System Server target DBID will be specified with the NODE field which is part of all Entire System Server DDMs.

Please change the value of ESXDB to 148 to run Natural with Entire System Server Interface support. All Entire System Server DDMs are catalogued with DBID 148.

After starting Natural again, you may access Entire System Server nodes running on the mainframes via Entire Net-Work.

Currently, the customization of Entire System Server Interface supports the modification of the Entire System Server DDMs only.

How to use a different DBID for the Entire System Server DDMs:

Library SYSNPR contains the CHANGEDB program which is used to modify the database ID of all Entire System Server DDMs. You will find all Entire System Server DDMs in the library SYSNPE.

The database ID entered as a new DBID value in the CHANGEDB program must also be specified as the value of the Entire System Server Interface database parameter (ESXDB) in the Natural Configuration Utility.